WHAT IS CLAIMED IS:

1. ~~A service providing system for associating service with a virtual object, for~~ disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising:

storage means for associating object information related to the shape and location of the virtual object with service information specifying a service content and for storing them; and

location-information acquisition means for obtaining location information used for identifying the location of the mobile member,

wherein, when it is determined according to the location information obtained by the location-information acquisition means and the object information stored in the storage means that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, service corresponding to the virtual object is provided according to the service information stored in the storage means.

2. A service providing system according to Claim 1,

wherein the mobile member and a management terminal for managing the virtual object are connected in a communication-allowed manner;

the mobile member has the location-information acquisition means, and sends the location information obtained by the location-information acquisition means to the management terminal; and

the management terminal has the storage means, and when the management terminal receives the location information, it determines according to the received location information and the object information stored in the storage means whether the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object.

3. A service providing system according to Claim 1,

wherein the mobile member and a management terminal for managing the virtual object are connected in a communication-allowed manner;

the management terminal has the storage means, and sends the object information stored in the storage means to the mobile member; and

the mobile member has the location-information acquisition means, and when the mobile member receives the object information, it determines according to the location information obtained by the location-information acquisition means and the received object

~~information~~ whether the mobile member is ~~disposed in the inside~~ area of the virtual object ~~identified by the shape and location of the virtual object.~~

~~4.   A service providing system according to one of Claims 2 and 3,~~

wherein, when the result of the determination indicates that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, the management terminal provides service corresponding to the virtual object according to the service information stored in the storage means.

5.   A service providing system according to one of Claims 2 and 3,

wherein the management terminal sends the service information stored in the storage means to the mobile member, and

when the result of the determination indicates that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, the mobile member provides service corresponding to the virtual object according to the received service information.

6.   A service providing system according to one of Claims 2 to 5,

wherein the management terminal further comprises:

input means for performing an input related to generation, deletion, or update of the object information; and

object-information processing means for generating, deleting, or updating the object information according to the content of the input performed by the input means.

7.   A service providing system according to one of Claims 1 to 6,

wherein the service information is operation information specifying the content of an operation of the mobile member or another apparatus, and

when it is determined that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, the mobile member or the another apparatus is operated according to the operation information corresponding to the virtual object, stored in the storage means.

8.   A service providing system according to one of Claims 1 to 7,

wherein the service information specifies the content of service in which media information related to characters, images, or video is provided for the mobile member, and

when it is determined that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, the media

information is provided for the mobile member according to the service information corresponding to the virtual object, stored in the storage means.

9. A service providing system according to one of Claims 1 to 8,

wherein the service information specifies the content of service in which notice information related to a notice or guidance information related to a guidance is provided for the mobile member, and

when it is determined that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, the notice information and the guidance information are provided for the mobile member according to the service information corresponding to the virtual object, stored in the storage means.

10. A service providing system according to one of Claims 1 to 9, wherein the mobile member is a portable terminal.

11. A service providing system for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising:

storage means for associating object information related to the virtual object with operation information specifying the content of an operation of the mobile member or another apparatus, and for storing them,

wherein, when it is determined according to the object information stored in the storage means that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, the mobile member or the another apparatus is operated according to the operation information corresponding to the virtual object, stored in the storage means.

12. A service providing system for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising:

storage means for associating object information related to the virtual object with service information specifying the content of service, and for storing them,

wherein, when it is determined according to the object information stored in the storage means that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, the service corresponding to the virtual object is provided according to the service information stored in the storage means; and

~~further comprising input means for performing an input related to generation,~~ deletion, or update of the object information; and object-information processing means for generating, deleting, or updating the object information according to the content of the input performed by the input means.

13.   A terminal connected to the mobile member used in a service providing system according to Claim 2 in a communication-allowed manner, comprising a storage means,

wherein, when the terminal receives the location information, it determines according to the received location information and the object information stored in the storage means whether the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object.

14.   A mobile member connected to the management terminal used in a service providing system according to Claim 3 in a communication-allowed manner, comprising a location-information acquisition means,

wherein, when the mobile member receives the object information, it determines according to the location information obtained by the location-information acquisition means and the received object information whether the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object.

15.   A service providing program for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object,

the program making a computer which is capable of using storage means for associating object information related to the shape and location of the virtual object with service information specifying a service content and for storing them, and location-information acquisition means for obtaining location information used for identifying the location of the mobile member, execute processing in which, when it is determined according to the location information obtained by the location-information acquisition means and the object information stored in the storage means that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, service corresponding to the virtual object is provided according to the service information ~~stored in the storage means.~~

43

16. A service providing program for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object,

the program making a computer which is capable of using storage means for associating object information related to the virtual object with operation information specifying the content of an operation of the mobile member or another apparatus, and for storing them, execute processing in which, when it is determined according to the object information stored in the storage means that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, the mobile member or the another apparatus is operated according to the operation information corresponding to the virtual object, stored in the storage means.

17. A service providing program for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object,

The program making a computer which is capable of using storage means for associating object information related to the virtual object with service information specifying the content of service, and for storing them, execute

processing in which, when it is determined according to the object information stored in the storage means that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, the service corresponding to the virtual object is provided according to the service information stored in the storage means, and

processing implemented as input means for performing an input related to generation, deletion, or update of the object information, and object-information processing means for generating, deleting, or updating the object information according to the content of the input performed by the input means.

18. A service providing method for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising the step of:

associating object information related to the shape and location of the virtual object with service information specifying a service content and storing them; and

44

~~obtaining location information used for identifying the location of the mobile~~ member; and

when it is determined according to the obtained location information and the stored object information that the mobile member is disposed in the inside area of the virtual object identified by the shape and location of the virtual object, providing service corresponding to the virtual object according to the stored service information.

19.   A service providing method for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising the step of:

associating object information related to the virtual object with operation information specifying the content of an operation of the mobile member or another apparatus, and storing them; and

when it is determined according to the stored object information that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, the mobile member or the another apparatus is operated according to the stored operation information corresponding to the virtual object.

20.   A service providing method for associating service with a virtual object, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the virtual object according to a positional relationship between a movable mobile member and the virtual object, comprising the step of:

associating object information related to the virtual object with service information specifying the content of service, and storing them; and

when it is determined according to the stored object information that the positional relationship between the mobile member and the virtual object satisfies a predetermined condition, providing the service corresponding to the virtual object according to the stored service information; and

further comprising the step of:

performing an input related to generation, deletion, or update of the object information; and generating, deleting, or updating the object information according to the content of the performed input.